

PNEUMATIC POWER

The Motor Development International (MDI) Airpod shown in the picture is a pneumatic car or a car powered by compressed air. It has 3 passengers with a top speed of 40 mph (64 Km/h) and has a range of 130 miles (210 Km) before a refill. It was mentioned that filling the tanks with compressed air takes 3-4 minutes. The car built-in air compressor that can plug into any standard electric outlet can refill the tanks in 4 hours.

The pneumatic car or passenger jeepney in my drawing has 2 compressed air tanks to power the twin-rotor TZUY TURBINE ENGINE. We can see that the TZUY TURBINE ENGINE uses only compressed air to power or propel the car. If we want more power and speed for increased acceleration we need to incorporate a combustion chamber fueled by Compressed Natural Gas (CNG). When the combustion chamber is added to propel the pneumatic car it can run much faster than powered by compressed air alone. So the power to propel the pneumatic car is now dual, powered by compressed air and high pressure hot expanding gases from the burning fuel. If we want again to add more power to the TZUY TURBINE ENGINE we can put water injectors outside the combustion chamber. The continuous spray of droplets or mists of water inside the TZUY TURBINE ENGINE can instantaneously make the water droplets turned into high pressure steam for additional power and it can also help cool the engine.

The pneumatic rescue boat can be used for rescue operation especially in areas where there's flood. If the weight of the MDI Airpod pneumatic car is the same as the pneumatic rescue boat it can have a nautical range more than 130 miles or 210 Kilometers before a refill. In the Philippines and anywhere else where islands are close to each other it can be used to ferry people from island to island or it can be designed as a bigger pneumatic boat to ferry more passengers.

The pneumatic tricycle can be a good mode of transportation within the town or city or even in villages. It will not produce carbon dioxide emission to harm the environment. This is better than 4-stroke gasoline powered piston-type engine because when the pneumatic vehicle is still or not moving as in a traffic jam it will not drain the energy from compressed air tank. Unlike in internal combustion engine, even the vehicle is not moving due to a traffic the engine is normally operating thus consuming precious fuel.

The pneumatic motorcycle although it may have a short range it can definitely compete with gasoline powered motorcycle and electric motorcycle. The advantage of this is that it is more reliable in wet and flooded locations where no parts are delicate to be wet or submerged in a flood. This pneumatic motorcycle is deliberately designed simple and rugged with very little maintenance.